



Klamath Network Featured Creature

March 2011

Rough-skinned Newt (*Taricha granulosa*)



FIELD NOTES:

General Description:

Though the Rough-skinned Newt appears cute and playful to some, they are actually extremely poisonous and have been known to even kill humans. They are very common in the Pacific Northwest at least in part due to this powerful deterrent to predators. Terrestrial newts are easy to identify by their dark-colored dorsal side and yellow-orange ventral side. Adults average 142 mm (females) to 169 mm (males) in length. Larvae are about 75 mm in length and are found in water where they use external gills and tail fins.

Habitat:

Rough-skinned Newts are commonly found in or around lakes, ponds, and slow-moving streams in the far western regions of North America (see range map). Populations occur from near sea-level to 2800 m (9186 ft). *Taricha granulosa* have terrestrial and aquatic life stages. Eggs and gilled larva are found in lakes, ponds, or stream pools, while juveniles and adults can become terrestrial and often move between aquatic and terrestrial habitats. Moderately moist forested habitats are preferred for terrestrial newts, though they also will inhabit more open valleys and even farmland.

Reproduction:

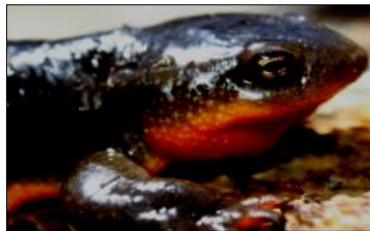
The reproduction process can be quite an endeavor for *T. granulosa* in their aquatic courting arena. Clasp the female, the male rubs her nose with his chin and moves his body against her back. This activity lasts up to two days before the male dismounts and deposits a single spermatophore in front of the female. The female then picks up the sperm cap with her genital cavity. Shortly after mating, the female begins depositing eggs one at a time in many locations within the aquatic habitat. Eggs hatch in 20-26 days and hatchlings are only about 18 mm in length.

More Information:

Nussbaum et al. 1983. *Amphibians and Reptiles of the Pacific Northwest*. University of Idaho, Moscow, Idaho. pp 112-117.
Petranka, J.W. 1998. *Salamanders of the United States and Canada*. Smithsonian Institution, Washington D.C. pp 462-469.



Taricha granulosa found in a minnow trap
Redwood National Park



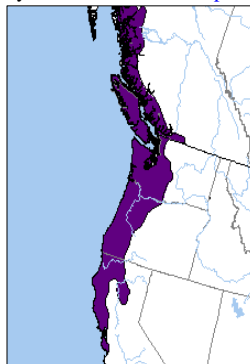
Picture taken at Oregon Caves
By John Roth



Gilled larva
Gary Nafis / CaliforniaHerps.com



Defensive "unken" posturing
Gary Nafis / CaliforniaHerps.com



range map

<http://idahoherps.pbworks.com>

Poison:

"If in danger, rough-skinned newts display orange-red undersides. This warns predators that a wee bit of their tetrodotoxin can kill, as it did to Oregon campers who brewed coffee in a pot where a newt had crawled and to a partying college student who swallowed one on a dare. (John Roth, personal communication)." In fact, these newts kill practically everything that tries to harm them. Only some garter snakes are known to have a resistance to the newt's toxin. This is due to a commonly cited example of co-evolution or an "evolutionary arms race;" as the predator and prey simultaneously evolve, they continually increase each other's defenses.

Where to See It in the Klamath Parks:

You are most likely to find newts at Crater Lake, Oregon Caves, and Redwood, though a few have been observed at Lassen and Whiskeytown as well. At Crater Lake, you may see a special variant of *T. granulosa*.

Taricha granulosa mazamae:

Depending on the literature source, this newt may or may not be a subspecies found only inside the Crater Lake caldera. In the late 1930s, it was proposed as a new subspecies due to variations in its ventral pigmentation. The undersurfaces are suffused to varying extents with the dark pigmentation found on the dorsum (Myers 1942).

During a bioblitz in 2010, comparisons of newts inside and outside of the caldera reignited interest in this issue and genetic research is now in progress. Next time you visit Crater Lake, ask the friendly aquatic ecologists if they have results!

References for *Taricha granulosa mazamae*:

Farner D. S., and J. Kezer. 1953. *Notes on the Amphibians and Reptiles of Crater Lake National Park*. The American Midland Naturalist. Vol. 50(2). pp 448-462.
Myers G. 1942. *Notes on Pacific Coast Triturus*. Copeia. Vol. 1942(2). pp 77-82.